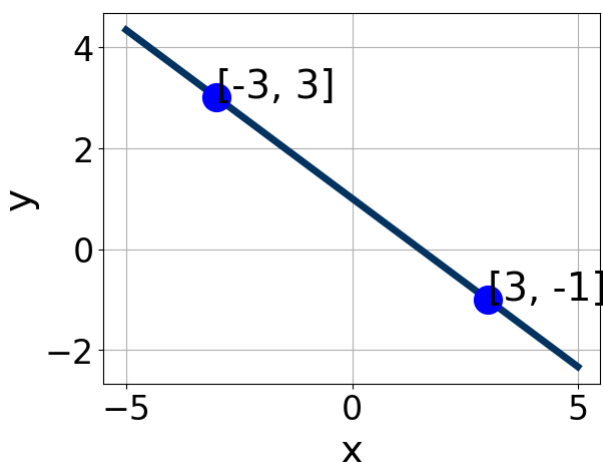1. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b.

$$(-9, 6) \text{ and } (-8, 10)$$

   A. $m \in [3, 9] \quad b \in [14, 16]$

   B. $m \in [3, 9] \quad b \in [-42, -40]$

   C. $m \in [-9, 3] \quad b \in [-24, -18]$

   D. $m \in [3, 9] \quad b \in [39, 43]$

   E. $m \in [3, 9] \quad b \in [16, 22]$

---

2. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.

   A. $A \in [0.9, 2.82], \quad B \in [2.1, 3.2], \text{ and } C \in [2.9, 4.18]$

   B. $A \in [-0.75, 0.8], \quad B \in [-0.9, 2.3], \text{ and } C \in [0.89, 1.33]$

   C. $A \in [-0.75, 0.8], \quad B \in [-1.2, 0.9], \text{ and } C \in [-1.63, -0.12]$

   D. $A \in [0.9, 2.82], \quad B \in [-4.5, -2.4], \text{ and } C \in [-3.28, -2.97]$

   E. $A \in [-3.19, -0.91], \quad B \in [-4.5, -2.4], \text{ and } C \in [-3.28, -2.97]$

---

3. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(7x - 2) = -6(-14x + 16)$$

A. $x \in [-0.59, -0.33]$

B. $x \in [0.38, 0.58]$

C. $x \in [0.67, 0.89]$

D. $x \in [-0.24, 0]$

E. There are no real solutions.

4. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b.

$$(-9, -5) \text{ and } (-10, -7)$$

A. $m \in [1.7, 4.1]$ $b \in [11.7, 15.01]$

B. $m \in [1.7, 4.1]$ $b \in [3.34, 5.29]$

C. $m \in [1.7, 4.1]$ $b \in [-13.21, -12.4]$

D. $m \in [-3, -1.1]$ $b \in [-28.17, -26.87]$

E. $m \in [1.7, 4.1]$ $b \in [1.52, 3.14]$

5. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.
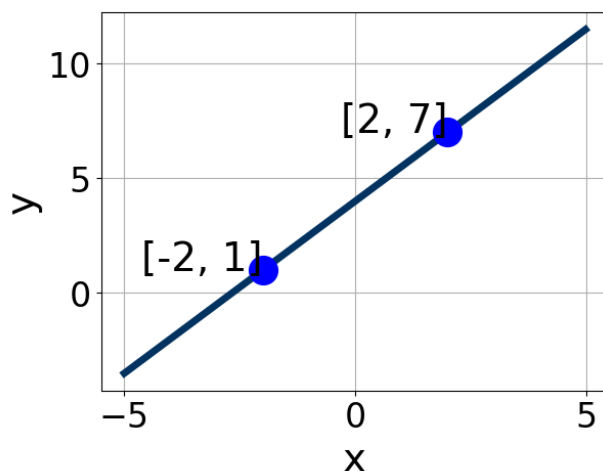
A. $A \in [-2.07, -1.15]$, $B \in [-1.44, -0.95]$, and $C \in [-5.5, -3.4]$

B. $A \in [-3.29, -2.8]$, $B \in [1.96, 2.69]$, and $C \in [7.3, 10.1]$

C. $A \in [1.55, 3.68]$, $B \in [1.96, 2.69]$, and $C \in [7.3, 10.1]$

D. $A \in [1.55, 3.68]$, $B \in [-2.26, -1.9]$, and $C \in [-8.9, -7.4]$

E. $A \in [-2.07, -1.15]$, $B \in [0.54, 1.34]$, and $C \in [3.4, 5.6]$

6. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(8x + 3) = -9(14x - 6)$$

A. $x \in [-2.8, -0.5]$

B. $x \in [-1.2, 0.1]$

C. $x \in [0.5, 2.6]$

D. $x \in [15.7, 17.6]$

E. There are no real solutions.

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-4x + 7}{8} - \frac{7x + 3}{5} = \frac{-6x - 3}{4}$$

A. $x \in [16.5, 19.5]$

B. $x \in [0.2, 2.2]$

C. $x \in [5.56, 8.56]$

D. $x \in [1.56, 4.56]$

E. There are no real solutions.

8. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

   Parallel to $5x - 8y = 12$ and passing through the point $(-4, -3)$.

   A. $m \in [0.74, 3.04]$ $b \in [-1.67, 0.09]$

   B. $m \in [-0.16, 0.63]$ $b \in [0.59, 1.56]$

   C. $m \in [-2.11, -0.52]$ $b \in [-5.65, -5.1]$

   D. $m \in [-0.16, 0.63]$ $b \in [-0.06, 0.58]$

   E. $m \in [-0.16, 0.63]$ $b \in [-1.67, 0.09]$

9. Solve the linear equation below. Then, choose the interval that contains the solution.
$$\frac{6x - 7}{7} - \frac{-3x + 9}{5} = \frac{3x - 3}{8}$$

   A. $x \in [11.3, 13.9]$

   B. $x \in [-0.4, 2]$

   C. $x \in [2, 2.9]$

   D. $x \in [-1.2, -0.9]$

   E. There are no real solutions.

10. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

    Perpendicular to $7x - 4y = 8$ and passing through the point $(-3, 2)$.

A. $m \in [-0.5, 0.9]$ $b \in [3.52, 4.84]$

B. $m \in [-1.11, 0.04]$ $b \in [4.56, 5.52]$

C. $m \in [-2.96, -0.9]$ $b \in [0.2, 0.5]$

D. $m \in [-1.11, 0.04]$ $b \in [-0.97, 0.16]$

E. $m \in [-1.11, 0.04]$ $b \in [0.2, 0.5]$